Bmk. No. A-11

Second Mate, Dredge Control Officer, Hopper Dredge, WJ-5782-08

MAJOR DUTIES

Serves as Second Mate on a self-propelled, seagoing, diesel-powered, automated hopper dredge, engaged in the maintenance and improvement of harbors and channels. Performs duties in two primary functions. Stands regularly scheduled bridge watches and production control watches. In the absence of the Assistant Master/Chief Mate, or for training purposes, assumes the duties of that position.

- 1. Stands regularly scheduled bridge watches with duties consisting of complete navigation and control of the vessel; steering; operating pilothouse navigation, safety, emergency equipment; and supervision of the dredging function. Maintains bridge log during watches and records movement of vessel, weather, tide, sea conditions, and other events and activities. Gives signals as prescribed by International and Inland Rules of the Road. Is in charge of one or more lifeboats and/or life rafts.
- 2. Responsible for operating the automatic dredging machinery. The workstation is on the bridge and consists of a "one man" automated dredge control station. Stands regularly scheduled production control watches, monitoring and controlling dredging operations in accordance with plans, specifications and instructions. Operates controls involving the dredging and dumping function. Observes gauges and adjusts controls to insure optimum loads. Is cognizant of sidewise set of vessel due to the combined effect of wind, current and sea conditions. Constantly monitors the automatic dredging control system. In event of malfunction, provides immediate manual response to override the automatic system, and raises the appropriate drag to prevent binding and breakage of the dredge pipe against side of dredge. Monitors the dredging and dumping functions and maintains continuing verbal communication with the mate on watch as to the effects of vessel speed and drift on dredging production. Records dredging production information and makes entries on multiple load data sheets. Incumbent periodically inspects dredging equipment and observes its working during production control watches. Any malfunction or maintenance needs are noted and coordinated with the Boatswain to obtain necessary repairs or preventive maintenance work.
- 3. Serves as Navigation Officer for the dredge with responsibility for the maintenance, care, updating and preservation of navigating equipment such as sextant, gyrocompass, radar, chronometer, clocks, charts and publications. Lays out work to be performed by Mate temporarily assuming Navigation Officer duties prior to periods of absence.
- 4. Performs a variety of supervisory tasks such as informally recommending promotions, reassignments, performance ratings and awards, disciplinary actions, step increases, etc. Also, establishes work standards, provides technical guidance, is responsible for training subordinates in safe working practices, for studying the method of performance of operations under his supervision, and correcting or reporting for correction any condition detrimental to the safety of the workers or others. Provides equal opportunity to all employees supervised regardless of race,

color, religion, sex, handicap, age, or national origin; and provides minorities and women full consideration in employment and personnel policies and practices.

Performs other duties as assigned.

SKILLS AND KNOWLEDGES

Must possess U. S. Coast Guard unlimited license for Second Mate, and for Assistant Master/Chief Mate license when acting in that capacity. In addition to the Nautical Rules of the Road, the most fully utilized functional areas are piloting, seamanship with heavy emphasis on shiphandling, and tides and currents. Must possess the ability to understand the principles of operation of automated winches and related mechanical systems. Must have the capability to operate the automated dredging control station and inspect the related equipment. Must be capable of being trained in the operation, troubleshooting, and repair of electronic-mechanical systems.

RESPONSIBILTIY

Works under general supervision. Performs duties and carries out responsibilities in accordance with regulations governing the operation of the vessel. Responsible for safe navigation and dredging during watch. Work is given an occasional spot check by observation of the vessel operation and review of log. Regulatory controls consist of U. S. Coast Guard rules and regulations, and District policies and operating procedures. Overall performance is evaluated in terms of performance appraisal standards established by the supervisor.

WORKING CONDITIONS

Work is performed in the pilot house, on deck and in other locations of the vessel. Spends most of the time in the pilothouse. Occasionally goes outside in all kinds of weather to attend to duties, being exposed to the elements and subject to slipping on wet decks. Danger of drowning is present in case of accident. There is danger from traffic hazards, particularly in foggy weather and at night

PHYSICAL EFFORT

Light to moderate physical effort is required for continuous standing and operating of various controls. Incumbent must have color and depth perception and be able to see in low visibility conditions in order to navigate a dredge. At times incumbent is expected to assist with loading an unloading stores and other items. This activity requires moderate to heavy physical effort.